



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/696,831

10/30/2003

James T. Beaucaire

D5453

9115

30409

7590

12/16/2004

EXAMINER

INTERNATIONAL ENGINE INTELLECTUAL PROPERTY COMPANY

MCCALL, ERIC SCOTT

4201 WINFIELD ROAD

P.O. BOX 1488

WARRENVILLE, IL 60555

ART UNIT

PAPER NUMBER

2855

DATE MAILED: 12/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

ms

Office Action Summary	Application No. 10/696,831	Applicant(s) BEAUCAIRE ET AL.	
	Examiner Eric S. McCall	Art Unit 2855	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/30/03</u> . | 6) <input type="checkbox"/> Other: ____ |

METHOD AND APPARATUS FOR USE WITH A FLUID FILTER

FIRST OFFICE ACTION

TITLE

The title of the invention is objected to because it is not descriptive of the claimed invention. A new title is required that is clearly indicative of the invention to which the claims are directed.

CLAIMS

35 U.S.C. § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 5-9, and 12-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Gottemoller et al. (2004/0200457).

With regards to claim 1, Gottemoller et al. teach a method comprising the steps of:
obtaining a measured fluid pressure near a filter (22) in an internal combustion engine
(abstract);

determining a predetermined value based on at least one engine operating parameter
(page 2, paragraph 20, lines 11-16 set forth that a normal fuel pressure, which is deemed as the
“predetermined value” as claimed by the Applicant, is a function of normal engine operating
conditions); and

comparing the measured fluid pressure to the predetermined value, yielding a compared
pressure (page 2, paragraph 20, lines 5-8);

when the compared pressure exceeds an established value, indicating that a potential fluid
problem is present (page 2, paragraph 20, lines 11-14).

With regards to claim 5, Gottemoller et al. teach the measured fluid pressure (76/80)
occurs near an outlet of the filter (22).

With regards to claim 6, Gottemoller et al. teach the measured fluid pressure (76/80)
occurs near an inlet of the filter (22).

With regards to claim 7, said claim closely parallels that of claim 1 and thus the same analogy that applies to claim 1 above also applies to claim 7.

With regards to claim 8, Gottemoller et al. teach the measured fluid pressure (76/80) occurs near an outlet of the filter (22).

With regards to claim 9, Gottemoller et al. teach the measured fluid pressure (76/80) occurs near an inlet of the filter (22).

With regards to claim 12, Gottemoller et al. is interpreted as indicating the warning condition as claimed because the outputs from the pressure sensors (76/80) are fed to the control unit (78). Thus, the transmission of the information from the sensors to the control unit is interpreted as the "indicating the warning condition" as claimed.

Furthermore, since Gottemoller et al. teach such a warning condition, one having ordinary skill in the art armed with said teaching would have the knowledge that in order to have a warning condition the warning condition must be communicated or the purpose of a warning condition would be defeated.

With regards to claim 13, Gottemoller et al. is interpreted as transmitting the warning condition to a remote location because the outputs from the pressure sensors (76/80) are fed to

the control unit (78). The location of the control unit is interpreted as a remote location as claimed.

With regards to independent claim 14, much like independent claims 1 and 7, Gottemoller et al. teach an apparatus comprising:

a pressure sensor (76) arranged and constructed to measure a pressure of a fluid near a filter (22) for the fluid of an internal combustion engine, yielding a measured fluid pressure (page 2, paragraph 20); and

an engine control module arranged and constructed to determine a predetermined value based on at least one engine operating parameter and to compare the predetermined value to the measured fluid pressure (page 2, paragraph 20).

With regards to claim 15, Gottemoller et al. teach the pressure sensor (76/80) located near a discharge of the filter (22).

With regards to claim 16, Gottemoller et al. teach the pressure sensor (76/80) located near an inlet of the filter (22).

35 U.S.C. § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-4, 10, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gottemoller et al. (2004/0200457).

With regards to claims 2-4, 10, and 17, Gottemoller et al. disclose that the predetermined value relates to fuel pressure and is based on normal engine operating conditions (page 2, paragraph 20), and therefore the predetermined value will be based on at least one engine operating parameter because normal engine operating conditions relating to fuel pressure are dependent upon at least one engine operating parameter.

Gottemoller et al. fail to explicitly disclose an exact operating parameter which accounts for normal operating conditions.

However, it would have been obvious to one having ordinary skill in the art that the at least one engine operating parameter may include engine speed, engine load, and/or fluid temperature.

The motivation being that Gottemoller et al. disclose that the “normal engine operating conditions” are in relation to fuel pressure. Furthermore, one having ordinary skill in the art has the knowledge that fuel pressure is dependent upon engine speed, engine load, and/or fluid temperature. Engine speed and load dictate the demands of fuel injectors and thus fuel pressure. Furthermore, a fluid temperature (which could be fuel, coolant, which relates to engine load, oil, which relates to engine load, etc.) also dictate the demands of fuel injectors and thus fuel pressure.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gottemoller et al. (2004/0200457) in view of Amano et al. (2004/0060343).

With regards to claim 11, Gottemoller et al. teach comparing the measured pressure to a predetermine value.

Gottemoller et al. fail to teach comparing the difference between the measured pressure and the predetermined value to a predetermined value and activating a timer based on the difference.

However, Amano et al. do teach comparing the difference between a measured pressure and a predetermined value to a predetermined value and activating a timer based on the difference (page 6, paragraph 84).

Art Unit: 2855

As such, it would have been obvious to one having ordinary skill in the art armed with said teachings to add to the teaching of Gottemoller et al. the comparison of the difference between the measured pressure and the predetermined value to a predetermined value and then activating a timer based on the difference as taught by Amano et al.

The motivation being to monitor the pressure difference with respect to time since a given pressure difference may not be indicative of a problem if the time period over which the pressure difference is monitored is of a great length. Pressure differences of a given amount over a short time period may be indicative of a problem such as a leak. Use of a timer allows for this determination.

RELEVANT ART

The Applicant's attention is directed to the enclosed "PTO-892" form for the prior art made of record and not relied upon but considered relevant to the state of the art of the Applicant's disclosure.


CONCLUSION

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Eric S. McCall whose telephone number is (571) 272-2183.

Art Unit: 2855

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Eric S. McCall
Primary Examiner
Art Unit 2855
Dec. 10, 2004